

Abstract

A galvanic probe comprises a sensor electrode and a reference electrode. The sensor electrode has an exposed surface that comprises a noble metal or antimony or bismuth, and, optionally, an oxide or hydroxide thereof. The reference electrode is 5 spaced apart from the sensor electrode and has an exposed surface that comprises zinc or magnesium, and, optionally, an oxide or hydroxide thereof. The probe may be incorporated into a device for controlling the pH and/or ORP of a fluid in a vessel to a desired pH and/or ORP level, incorporated into methods for measuring the pH and/or ORP of a fluid, or used as a galvanic cell.